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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/821,681 | 04/09/2004 | Karl Schrodinger | 16274.13a.1 | 1358 |
| 22913 | 7590 | 05/08/2006 | EXAMINER | |
| WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111 | | | FLANAGAN, KRISTA M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2817 | |

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,681

Applicant(s)

SCHRODINGER, KARL

Examiner

Krista M. Flanagan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-21 is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. In view of the amendment filed 22 March 2006, the Examiner withdraws all objections to the drawings from the previous Office Action dated 18 September 2005.

1. The drawings are objected to because figure 4 needs the English translation for “Spektrale Rauschleistung”.

2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. In view of the amendment filed 22 March 2006, the Examiner withdraws all objections to the specification from the previous Office Action dated 18 September 2005.

Response to Arguments

3. Applicant's arguments filed 22 March 2006 have been fully considered but they are not persuasive.

4. The Applicant argues "Mohandas fails at least to teach or suggest 'at least one control terminal of the circuit, by which an operating point of the amplifier can be changed between at least two values at a user end,' as recited in claim 1... Mohandas discloses only an adjustment made by the control circuit 16 based on feedback, and not by way of 'at least one control terminal of the circuit, by which an operating point of the amplifier can be changed between at least two values at a user end,' as recited in claim 1".

5. The Examiner respectfully disagrees and asserts that Mohandas does teach a receiver circuit where the operating point of the amplifier can be changed at a user end. Mohandas discloses an amplifier system, 10, with a control circuit; an amplifier having a controllable gain coupled to the control circuit, 16; and a controllable input impedance circuit with discrete settings coupled to the control circuits set by the control circuit to have constant input impedance. The photodiode, 12, outputs a voltage, which is detected by the control circuit, 16, which then controls the gain of amplifier, 18. The disclosure of Mohandas fully reads on the rejected claims of the current application. The Examiner also directs attention to the applicants own disclosure concerning the disputed "operating point of the amplifier [that] can be changed over between at least two values at the user end" in paragraphs [007] – [0010] of the applicant's

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specification. In paragraph [0010], applicant states “In particular, it is preferably provided that the impedance network has a plurality of ohmic resistors, which can be connected in and disconnected by means of the at least one switching devices and at least one control terminal.” Mohandas discloses two switches and two control terminals that are user configurable. There is no mention that the control terminals must be external. For the reasons above, the rejection stands.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,933,786 to Mohandas et al.

4. Regarding claims 1 and 17, Mohandas disclose a light optical detector or photodiode, 12, which is coupled to an amplifier system, 10. The amplifier system includes control circuit, 16, that receives input from the photodiode to control a gain of an amplifier, 18, and an impedance circuit, 20. The control circuit, 16, can select between a first and second range. This

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configuration is disclosed in figure 1 and in the corresponding text at column 1, line 57 through column 2, line 26, specifically at column 1, line 62 through column 2, line 13.

5. Regarding claims 2 and 8, which inherit all of the limitations of claim 1, Mohandas disclose an amplifier, 18 which includes an input transistor, 46. Input transistor, 46, is coupled to gain adjustment resistor, 56. Gain adjustment resistor, 56, is coupled to switch, 58, which is coupled to the first range from the control circuit, 16. The value for the gain adjustment resistor, 56, is calculated based on the first range from the control circuit, 16, and the transconductance of the input transistor, 46. This configuration is disclosed in figure 2 and in the corresponding text at column 2, lines 26-52.

6. Regarding claim 3, which inherits all of the limitations of claim 2, Mohandas disclose an amplifier, 18 which includes an input transistor, 46. Input transistor, 46, is coupled to controllable current source, 62. Controllable current source, 62, adjusts the current to the transistor, 46 therefore adjusting the gain of the amplifier, 18. This configuration is disclosed in figure 3 and in the corresponding text at column 2, line 53 through column 3, line 3.

7. Regarding claim 4, which inherits all of the limitations of claim 3, Mohandas disclose an amplifier system, 18, where the circuit, 44, for controlling the operating point of the amplifier is coupled between the input transistor, 46, and the ground.

8. Regarding claims 5, 6 and 7, Mohandas disclose an amplifier system, 18, which comprises a controllable input impedance circuit, 20, formed by a variable feedback resistance. The variable feedback resistance includes a first and second resistor, 26 and 30, coupled to a first and second switch, 28 and 32, respectively. The control circuit, 16, controls the switches. The switches are not specifically disclosed as transistors but it is well known in the art that transistors

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are frequently used in such capacity. This configuration is disclosed in figure 1 and in the corresponding text at column 1, line 57 through column 2, line 26, specifically at column 1, line 67 through column 2, line 13.

9. Regarding claim 9, which inherits all of the limitations of claim 8, Mohandas disclose an amplifier system, 10, where the control circuit controls a gain of a trans-impedance amplifier, 18 as discussed in column 1, lines 62-65.

10. Regarding claims 10-12, Mohandas disclose an amplifier system, 10, which includes an impedance circuit, 20 formed by a variable feedback resistance which influences the internal gain of the amplifier. When the gain of the amplifier is changed the impedance is adjusted to maintain constant input impedance. See corresponding text at column 1, line 67 through column 2, line and column 3, lines 29-37.

11. Regarding claims 13-16, Mohandas disclose an amplifier system, 18, which comprises a controllable input impedance circuit, 20, formed by a variable feedback resistance. The variable feedback resistance includes a first and second resistor, 26 and 30, coupled to a first and second switch, 28 and 32, respectively. The control circuit, 16, controls the switches. When the gain of the amplifier is changed the impedance is adjusted to maintain constant input impedance. The switches are not specifically disclosed as transistors but it is well known in the art that transistors are frequently used in such capacity. This configuration is disclosed in figure 1 and in the corresponding text at column 1, line 57 through column 2, line 26, specifically at column 1, line 67 through column 2, line 13.

Allowable Subject Matter

12. Claims 18-21 are allowed.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista M. Flanagan whose telephone number is (571) 272-2203. The examiner can normally be reached on Monday - Friday, 8 - 4:30.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Flanagan
20060419

A handwritten signature in black ink, appearing to read 'Robert Pascal', with a long horizontal flourish extending to the right.

Robert Pascal
Supervisory Patent Examiner
Technology Center 2800